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09/412,408	10/05/1999	Kevin Foley	3524.4	9618

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EXAMINER

HEWITT II, CALVIN L

ART UNIT PAPER NUMBER

3621

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/412,408

Applicant(s)

FOLEY ET AL.

Examiner

Calvin L Hewitt II

Art Unit

3621



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Status of Claims***

1. Claims 1-29 have been examined.

***Response to Arguments/Amendments***

2. The Examiner has considered the Applicant's amendments and arguments. However, the prior art continues to read on the Applicant's claims.

Claim 1 has been amended to include the limitation of determining whether a better trade exists outside the system for both a party and a counterparty, and if such a trade exists executing a trade. Silverman et al. teach a system where a party enters an order (bid or offer) and the system then matches the order with a counterparty order. Tilfors et al., teach an automated exchange system where a party enters an order in a first system, the invention of Tilfors et al. then checks for a better price outside the first system, determines which trade is better (the first system or outside the first system) and executes the better trade. Hence, the combined system allows for traders to get the best price ('940, abstract). Tilfors et al. teach order books and order books comprise buy and sell orders, hence the system seeks a best price for a party whether that party is a buyer or seller ('940 abstract; column 1, lines 15-40). Therefore, to one of ordinary skill the combined Silverman et al. and Tilfors et al. system would operate to seek a better price ('940 figures 1 and 2) for both a party (buyer or

seller) and a counterparty (seller or buyer) ('082, abstract) outside the initial trading system ('940 figures 1 and 2) in order to provide a fair and efficient capital market. The above analysis also applies to claim 7.

Claims 16 and 26 have been amended to include the limitation of transmitting an "IOI with respect to which an order has been entered". Silverman et al. teach IOI, or expression of interest, that comprise an order, as IOI of Silverman et al. triggers buy/sell responses from counterparties seeking to fulfill said order (figure 2; column 4, lines 4-12). Further evidence that the IOI of Silverman et al. also serves as an order can be found in the fact that order parameters such as price, size and dates can be made "firm", and non-negotiable, while counterparty credit ranking can be negotiable (column 5, lines 1-7; column 7, lines 25-30; column 12, lines 18-36), and like the IOIs of Silverman, orders do not have to be completed (e.g. "soft" orders, cancellations). Therefore, the expression-of-interest, or IOI, (column 2, lines 27-30), as taught by Silverman et al., is both an indication of interest and an order (note: the claims as they are written do not exclude such a possibility). Claim 16 is broad, as it has not sufficiently linked the IOI and the order. Hence, claim 16 reads on a user making an order for a stock some time in the past, then placing an IOI for said stock or a related stock. Recall, Silverman et al. allow for a user to create subsets of users (figures 2 and 3; column 7, lines 14-50; column/line 9/25-10/40).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 has been amended to read, "if there is no better trade in at least one stock order originating from outside the system for the particular stock for both the first party **and** the counterparty". However, this is not supported by the Specification. According to the Applicant's Disclosure, during negotiations "the system continues to consult the book of public trades in [step 86] for a match of a public trade with either side of the anonymously negotiated trade" and if there is match determines and executes the better trade (negotiated vs. book) (Specification, page 16, lines 6-22). According to newly amended claim 1, the above scenario would only take place if the other party in the negotiations also had a better trade, otherwise the system would execute the negotiated trade despite a party or counterparty having a better trade available.

Claims 2-5 are also rejected as they depend from claim 1.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. According to the Applicant's Disclosure, during negotiations "the system continues to consult the book of public trades in [step 86] for a match of a public trade with either side of the anonymously negotiated trade" and if there is match determines and executes the better trade (negotiated vs. book) (Specification, page 16, lines 6-22). According to newly amended claim 1, however, the above scenario would only take place if the other party in the negotiations also had a better trade, otherwise the system would execute the negotiated trade despite a party or counterparty having a better trade available.

Claims 2-5 are also rejected as they depend from claim 1.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverman et al., U.S. Patent No. 5,924,082 in view of Tilfors et al., U.S. Patent No. 6,377,940.

Silverman et al. teach a distributed negotiated matching system where users can buy and sell securities over a plurality of markets (abstract; column 7, lines 1-34; column 12, lines 18-36) comprising:

- user terminals or input/output devices for conducting transactions (column 6, lines 17-26)
- parties involved in the buying and selling of securities (column 3, lines 36-49 and 60-67)
- a database identifying users who have been involved in recent trading activity (column 4, lines 13-50; column 5, lines 1-7 and 48-60; column 7, lines 14-33)

- the matching of users based on specified trading parameters (column 4, lines 13-50; column 5, lines 48-60; column 11, lines 5-30)
- the creation of a subset of users and the presentation of data to all or only selected users (abstract, lines 6-17; column 8, lines 1-59)
- the display of bids and offers to users (column 8, lines 11-17)
- user selection of parties with whom to interact (column 8, lines 10-58)
- pop-up windows for conducting negotiations between parties (figure 6, item 600; column 12, lines 18-21)
- the electronic, anonymous negotiation of trade terms and conditions (column 3, lines 65-67; column 4, lines 1-3, 9-12 and 27-49)
- the electronic execution of trades only after both parties are satisfied with the negotiated transaction terms (column 5, lines 1-8)

Regarding the timing of when bids and offers are displayed, Silverman et al. teach a system that distributes bids and offers to the remote terminals of



users of the system (column 4, lines 28-54), displays offers throughout the negotiating process (column 7, lines 42-49) and that bids and offers may be entered into the system at any time (column 7, lines 25-32). Therefore, it would have been obvious to allow a user to view bids and offers throughout the transaction process in order to obtain the best price. However, Silverman et al. do not explicitly recite price discovery outside the initial trading system. Tilfors et al. teach a system that receives security orders in an initial system, automatically checks the corresponding price of the security outside the system, and allows a match only if a better match cannot be found (abstract; figures 2 and 3; column/line 1/50-2/2). In addition, Tilfors et al. teach negotiations allowing a market maker to match a price from outside the system (column 2, lines 60-67) and executing trades such that priority is given to orders from the initial system (column 3, lines 25-32). Therefore, it would have been obvious to combine the teachings of Silverman et al. and Tilfors et al. in order to provide users with an improved interface for negotiating trades and receiving financial information ('940, figure 1; '082, figures 5A-7; column/line 11/35-12/36) and to reduce or eliminate the risk of a person entering an order into an automated exchange to get a worse price than he could have gotten at another exchange ('940, column 1, lines 42-46).

9. Claims 16-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverman et al., U.S. 5,924,082 in view of McCausland et al., U.S. 5,243,331.

As per claims 16-29, Silverman et al. teach an electronic trading system comprising:

- user terminals or input/output devices for conducting transactions (column 6, lines 17-26)
- the matching of users based on specified trading parameters (column 4, lines 13-50; column 5, lines 48-60)
- the creation of a subset of users and the presentation of data to all or only selected users (abstract, lines 6-17; column 8, lines 1-59)
- the ability to enter indicators of interest (column 2, lines 17-30; column 3, lines 55-60)
- entering IOI with offers or bids (column 7, lines 25-30)

Silverman et al., also provide a user with the ability to establish parameters for selectively interacting with other participants, offers and bids (column 7, lines 25-31), and disclose prior art trading systems that allow users to enter expressions of interest only after entering an order (column 2, lines 17-30). However, Silverman et al. do not explicitly recite transmitting an IOI with an order only if that order exceeds a threshold quantity. Ferstenberg et al. teach a trading

system where a participant utilizes an electronic agent for the purposes of buying and selling commodities (column/line 3/51-4/3). The "e-agent" is programmable and electronically represents a participant's trading goals (column 3, lines 21-41; column 14, lines 36-40). Using e-agents participants are allowed to make an opening message that establishes the bounds within which a final exchange must lie- the maximum and minimum amounts of each commodity the e-agent is prepared to buy or sell (column 12, lines 62-67; column/line 13/25-14/6; column 14, lines 45-67). As in the case of Silverman et al. ('082, abstract), Ferstenberg et al. disclose an intermediary for matching buyers and sellers (figure 1). In the Ferstenberg et al. teaching the intermediary exchanges e-agent openings, offers and counteroffers that are determined by e-agent constraints such as a maximum amount exchanged (i.e. threshold quantity) (column 15, lines 1-61; column/lines 18/6-19/54). Therefore, it would have been obvious to one of ordinary skill to program the e-agent to implement a desired trading strategy, such as "all or none" (column 19, lines 19-31) or other strategies that are based on a specified quantity, as e-agents are programmed, using rule interpreters and procedural rules, to evaluate offers, and can be tailored to meet a participant's objectives (column 14, lines 45-67). However, neither Silverman et al. nor Ferstenberg et al. utilize a specialized keypad. McCausland et al. teach a dedicated keypad for a financial trading system (abstract). The keypad has special functionalities such as "bid", "confirm", "reject" "kill" commands in order to

control the exchange of data between parties (figure 3; column 7, lines 38-49; column 23, lines 1-62). The keypad also allows a user to combine keys in order execute a function such as editing an order (column 23, lines 40-57). Therefore, it would have been obvious to one of ordinary skill of the art to combine the teachings of Silverman et al., Ferstenberg et al. and McCausland et al. in order to provide a more user-friendly interface by integrating common trading functions into the keyboard and to maximize the aggregate number of units of commodities exchanged in a fair manner that is acceptable to the participants ('071, column 3, lines 42-50; column 18, lines 5-67).

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (703) 308-8057. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James P. Trammell, can be reached at (703) 305-9768.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
c/o Technology Center 2100  
Washington, D.C. 20231

or faxed to:

(703) 305-7687 (for formal communications intended for entry and after-final communications),

or:

(703) 746-5532 (for informal or draft communications, please label "PROPOSED" or "DRAFT")


Art Unit: 3621

Hand-delivered responses should be brought to Crystal Park 5,  
2451 Crystal Drive, 7th Floor Receptionist.

Any inquiry of a general nature or relating to the status of this application  
should be directed to the Group receptionist whose telephone number is (703)  
308-1113.

Calvin Loyd Hewitt II

June 15, 2004

  
JAMES P. FRAMMELL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600